Retention of CS faculty

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Perceptions

• Faculty attrition has become a significant problem
  – Faculty are being lost to industry
  – Faculty are being lost to competitor departments

• These combined effects are serious and increasingly problematic; many of our best faculty have gone elsewhere
Data

• Taulbee survey
  – Total faculty losses in a given year
  – Losses to other academic units and to industry
  – Data available for several years running

• R/R survey of dept chairs (Ph.D. and UG)
  – Losses during past 3 years
  – Reasons why people left (and didn’t if they considered leaving but ended up staying)
  – Chief retention issues and institutional support
  – Leave policies
Data (cont’d)

• R/R survey of recent academic job changers
  – Reasons why they left
  – Criteria for where they applied for new position, and how they decided among competing offers
  – Things former dept could’ve done to have made them stay
Overall losses

- Taulbee shows total losses of 1.95/dept in FY01, up from 1.36 in FY99
- Avg dept size is 20-25 t-t faculty (over 30 in top ranks, less than 20 in lower ranks)
- => total loss rate averages <10%/yr/dept, exclusive of those on LOA
When do losses occur?

Faculty losses by yrs of service
(R/R Ph.D. dept chairs' survey)
Losses to industry

- Taulbee shows about .35-.4 per dept per year to industry during the past 3 yrs (steady during this period)
- R/R dept chair survey showed avg of 2 persons per dept on non-sabbatical leave during past yr (several of these may become departures in subsequent years, if not for dot.com crash)
Losses to other academic depts

- R/R dept chair survey showed half of all losses were to other academic depts (most in same tier; about same fraction moving up as moving down)
- Taulbee survey shows just over 40% go to other academic depts
  - .75-.8 per year per dept to other depts in each of past 2 yrs, up from .48 per year in FY99
• Job changers survey: those from a given tier went to higher ranked institutions than did new hires from same tier (this may be a skewness of our sample of job-changers)
Factors mentioned most by dept chairs as influencing departures

- Appeal of industry
- Personal reasons
- Salary
- Dept ranking/reputation
Factors mentioned most by recent job-changers as main reasons why they left

- Access to quality grad students (M&W)
- Dept morale/culture (M&W)
- Salary (M)
- Presence of research colleagues (W)

Better institution support was cited most frequently as making a difference in their willingness to stay at former institution
Factors influencing where to apply (job-changers)

- Dept ranking/reputation (M&W)
- Access to quality grad students (M&W)
- Presence of research colleagues (W)
- Geography (W)
Factors influencing decision among multiple offers (job-changers)

- Dept ranking/reputation
- Geography
- Access to quality grad students
- Salary
- Presence of colleagues in research area
Undergrad colleges

- Avg t-t size is 6.4
- Total losses of 1.1 per dept over 3 yrs (~6%/yr/dept)
  - 21% to industry
  - 37% to other academic depts
- Most leave for personal reasons, death or retirement, rather than salary, workload, or dept reputation
When do losses occur?

Faculty losses by yrs of service
(R/R UG dept chairs’ survey)
Possible conclusions

• Rise in attrition rate makes depts feel that there is a serious retention problem, though actual percentages are, on avg, not large
• Losses, coupled with those on LOA may amount to significant percentage of previous year’s faculty (~25% incl sabbaticals)
• In certain depts, particularly lower ranked, larger fraction of best people may be away or leaving, creating serious obstacles to sustaining and improving their position